

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
30 June 2005 (30.06.2005)

PCT

(10) International Publication Number
WO 2005/058792 A1

(51) International Patent Classification⁷: **C07C 67/00**,
69/16

(21) International Application Number:
PCT/EP2004/013903

(22) International Filing Date: 7 December 2004 (07.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
03028811.2 15 December 2003 (15.12.2003) EP

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(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: PROCESS FOR THE MANUFACTURE OF TRIMETHYLHYDROQUINE DIALKANOATES

(57) Abstract: The present invention is directed to a process for the manufacture of a 2,3,5-trimethylhydroquinone dialkanoate comprising reacting ketoisophorone with an acylating agent in the presence of an indium salt as the catalyst. Preferred are indium(III) salts such as indium trichloride or indium tris (trifluoromethanesulfonate). Further aspects of the present invention are a process for the manufacture of 2,3,5-trimethylhydroquinone using 2,3,5-trimethylhydroquinone dialkanoate as the starting material, especially a process for the manufacture of 2,3,5-trimethylhydroquinone by transesterification of 2,3,5-trimethylhydroquinone dialkanoate, as well as a process for the manufacture of a-tocopherol and its alkanoates, especially of (all-*rac*)-a-tocopherol and its acetate, comprising the reaction of ketoisophorone to 2,3,5-trimethylhydroquinone dialkanoate according to the present invention. Furthermore, the present invention also deals with a process for the manufacture of formulations of a-tocopherol and its alkanoates, especially of formulations of (all-*rac*)-a-tocopherol and its acetate, comprising the reaction of ketoisophorone to 2,3,5-trimethylhydroquinone dialkanoate according to the present invention.



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